

432 MHz AND ABOVE EME NEWS

MAY 1997 VOL 25 # 6

EDITOR: ALLEN KATZ, K2UYH;

ENGR DEPT., THE COLLEGE OF NEW JERSEY, TRENTON, NJ 08650-4700 (W 609-490-2817 OR H 443- 3184, FAX 609-443-1713, AND EMAIL [Allen Katz, K2UYH](mailto:Allen.Katz@cnj.edu)

PRODUCTION ASSIST: TOM KIRK, KA2VAD (908-521-2049).

SKEDS CORD & DIRECTORY: DL4EBY/DK0TU, KLAUS TIEDEMANN,
HALSKESTR.35, D-12167 BERLIN, (49-30-7955467), E-Mail: [Klaus Tiedemann.](mailto:Klaus.Tiedemann@t-online.de)

***E-MAIL LIST CORD [Scott KD4LT](mailto:Scott.KD4LT@att.net)

*** NA EME BBS: 704-284-4854 ***

EME NETS:

14.345 1600 Z SAT/SUN;

- NET CONTL: JOE, K1RQG (207-469-3492), E-MAIL: [Joe, K1RQG](mailto:Joe.K1RQG@att.net)
- EME STANDINGS: JIM STARKEY, W0KJY, 3845 CAPITOL DRIVE, FT. COLLINS, CO 80526, (970) 226-0669)
- THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT: [432 MHZ AND ABOVE NEWSLETTERS.](http://www.pa0zn.nl/432MHzAndAboveNewsletters/)

CONDITIONS

Although there may be some disagreement, I believe most 70 cm stations found conditions to be rather poor. It must have been especially difficult for fixed pol yagi stations. For much of the contest I had to rotate polarization between TX and RX by 90 degs to be heard. Fading and overall signal quality made copy a challenge without the added ingredient of QRM. Things were somewhat better on the higher bands with

increased activity on 13 and 3 cm during the weekend.

7M2PDT

Shu (QM05ek) sends -- My new antenna, 16 x 14 el FO LR yagis with openwire phasing lines was completed in March. It has high VSWR in rain, so I can not be QRV when it is raining. I have ZTRACK running to assist in setting optimum tx pol, but I believe the tx pol it predicts is not very accurate. It is difficult for me to move pol every time I standby. I worked on 15 March K1FO, JA5OVU, JA4BLC, JA2TY, JA2KRW, JH4JLV and DL8OBU, on 23 March PA2CHR for initial #79, on 27 March W7QX, during EUR EME Contest on 12 April K1FO, JA5OVU, N2IQU, K4QI, JH0YSI, OH2PO, OZ4MM, DF3RU, EA3UM #80, JH1XUJ and I2COR #81, and on 13 April W7QX, K0RZ, SM3AKW, UR5LX, JA4BLC, UT5EC #82, G3LTF, JA9BOH and F6CGJ #83. My contest total was 20x15 for 30 K points. I plan to be active again during the May SW.

AA5C

Greg had an interesting session on 3 cm EME during the 2nd half of the DUBUS/REF contest on 12 April. Conditions were good and there even seemed to be QRM on 10 GHz! I had arranged a sked on 10368.100 with VE7CLD for 2000. After one sequence, I realized that I was being called by WA7CJO and F6KSX, both of whom I worked in short order. Also heard was G3WDG. I made a quick land line to Gunter. We moved to .200, where we completed in 20 min. Then I tuned back to .100, called CQ, and was answered by G3WDG. Shortly thereafter I ran out of moon at 70 deg el and thus missed a contact with G4KGC. The result was 3x3 with 1 initial (VE7CLD). The 100 w from the new 6191 TWTA makes a marked improvement over the 30 w from the 6196 tube, and provides consistently good echoes. The new TWTA is not permanently installed like the 30 watter, but it takes less than an hour to get into place. I added a return spring and picked up another 10 degs of el control - now 5-70 degs. I continue to look for new stations to work on 10 GHz EME.

CT1DMK

Luis reports on his latest activities -- On 432 MHz during the contest I worked OH2PO (O/O), OZ4MM (O/O), SM2CEW (O/O), DL9KR (559/549), UR5LX (O/O) and K1FO (O/M). Just before the contest I changed my preamp to an FHX35. Signals were better and my QRZ rate increased. CWNr where N4GJV, K4QI, JA2JRJ?, EA3UM, F6CGJ and DF3RU. On 10 GHz, since my 1st QSO with WB5LUA, I have tweaked up my moon tracking software to accommodate 10 GHz. It now tracks the moon, fully automatically for more than 2 hours without noticeable deviation nor human intervention. The software now works like this: I have too find the exact moon position by peaking on moon noise.

Then I tell the computer that the antenna is "on spot". It calculates the possible mechanical/tracking errors. The computed values are stored for use in correcting (following) commands to the antenna controller. This technique works well for several hours at +/- 0.1 dB on my 1.0 dB moon noise. (I use a PC to calculate the moon position and a controller that receives the Az/El information via RS232.) The feed, a scalar horn with 3 movable corrugations, was set to maximum sun noise. And also to underilluminate the dish in hope of broadening the antenna beamwidth. I ended up with about 0.4 deg. at -3 dB, and a moon noise of 0.6 dB. TX output power is about 22 w from an RW1125 TWT. I again measured the NF and found it about 2 dB if all SMAs and the coax to WG transitions are included. This explains my relatively low moon noise. A WG mounted preamp is now under construction. I worked on 9 April WA7CJO (O/O) and after a struggle DJ7FJ (O/O) - I had to change the polarity because the moon was too far west and my polar mount added about 38 degs to the CT/DL spatial crosspole of 20 degs. It took a while to figure all this out. Both Joe and I had good echoes. Frequency misalignment was ruled out because WA7CJO was heard, and we both put echoes on his frequency. (Thanks for the beacon, Jim). After Joe changed his polarity, we QSO'd in 5 mins with good copy. Jim, WA7CJO had an excellent signal and was good copy on SSB in QSO with DJ7FJ. During the contest I was on 10 GHz for several hours and worked WA7CJO (O/O) in a snap. After this my feed sent out smoke signals announcing that my contest activity on 10 GHz was over. A failure in the power supply with typical smoke and pyrotechnics was the reason. Hopefully the tube survived.

DD1XF

Frank made initials during the 1st 3 months of '97 on 1296 with G4CCH, CT1DMK, JA6CZD, I6QGA, DJ7FJ, K4QI and VE4MA. He CWN'd G4DZU, SM5DGX and K5JL - for more than an hour.

DK3FB

Ridiger worked during the DUBUS/REF Contest OH2PO, OZ4MM, K1FO, N4GJV, K2UYH, K4QI, DL9KR, PA2CHR for an initial (#), DF3RU, EA3UM, KD4LT, UR5LX, F6CGJ and DL3EAG (#).

DL4KG

Gerald, worked during the contest on 12 April OH2PO (O/O=), N4GJV (O/O), K4QI (439/439), ON4KNG (O/O), K1FO (O/O), DL9KR (559/439) and DF3RU (O/O), and on 13 April K2UYH (439/439) and OZ4MM (O/O). Heard, but not QSO'd were K5GW, VE1ALQ, DK3WG, EA3UM, K0RZ, PA2CHR and SM3AKW.

DL4MEA

Guenter writes -- Here is my report for the DUBUS contest on 12 April. Before

the contest I made some improvements to my RX system. I tried to halve the cable length between my yagis and preamp. Its now 2.5 m of RG213. While making these changes I observed that the brass tubes of the driven elements of my BV yagis had developed cracks, and that most of the silver plating is off. My next improvement will be to replace these elements and solder the cables directly to the driven elements. This should be cheaper, more water resistant and have lower losses. The results of the present improvements are promising. During the contest I was QRV only Saturday from 1800 to 2300, and had QSOs with OH2PO (O/O), N4GJV (O/O) and DL9KR (O/O) - best signal this day. I heard K2UYH (O) for about 15 min. When I called him, he came back to another and after that nil was heard. I also heard N4MW? and UR5LX. I am now using a 2 x 4CX250 PA, 6 x 33 el yagis and a MGF1302 preamp - (RX is still not what I expect it to be). I am ususally available for skeds from Monday thru Thursday between 1400 and 2100. For west directions, I need a minimum el of 15 degs because of trees. My email is DL4MEA or Gunter

DL3EAG

Stephan reports -- After 3 months of absense caused by lots of QRL abroad, I managed to be on the air again during the 2nd leg of the contest. I found the activity quite low, no JA's were heard and only a couple of K's. I worked the following stations, 12 April at 2145 OH2PO (549/539), 2205 K2UYH (439/429) and 2235 K4QI (439/O), and on 13 April at 1045 EA3UM (O/O) for initial #17, 2222 partial DK3FB (M/T), 2305 F6CGJ (O/O) #18 and 2335 K1FO (439/439). I heard K0RZ, N4GJV, DL4KG, ON4KNG, DF3RU, OZ4MM and DL9QX. The conditions seemed poor. Although I could hear ON4KNG quite strong (449), he coundn't hear me. I tried also several times to work K1FO, but no response until Sunday night. I'm looking forward to some skeds in May via the NL or via e-mail. My address is [Stephan, DL3EAG](mailto:Stephan.DL3EAG)

DL/G4FUF

Keith writes -- I am now working in DL land (JN58) for the forseeable future on the European contribution to the International space station project. My father has passed away so I was not in England for the April skeds + contest weekend as planned. [We are all sorry to learn of your loss.] Apologies to all missed. I will hopefully find time to be QRV later in the year. Please no more skeds for the moment. I intend to be QRV on 24 GHz EME at some point from DL. I plan to loan my TWTA to Joe, DF7DJ, so he can do some echo tests!. I currently have 12 w output on this band.

G3LTF

Peter observes -- April produced the 1st lousy conditions on 432 for some months. I guess due to the near miss from the solar storm or was it just the on set of summer condx? The polarity was very spread for most of the time,

especially for the northern stations. Echoes sounded weak even when one rotated the pol to compensate. I had hoped to be on 13 cm but all sorts of things intervened and so I stuck to 432 and a bit on 1296. I have now cured the transmit feeder loss problem on 1296/2304 and reduced the loss by 1-2 dB at least. I hope to be on 2320 (TX) and 2320/2304 (RX) in May. On 432 on 12 April I worked EA6ADW for initial #315 and a new DXCC, DF3RU, SM3AKW, F1IKA #316, OH2PO, OZ4MM, F5AQC, EA3UM, SM2CEW, K5GW, DK3WG, K2UYH, PA2CHR initial #317, N4GJV, K5JL, K4QI, ON4KNG, VE1ALQ, K1FO, W7FN, KA0RYT and called W0AH from 2325 to moonset without him getting the call, and on 13 April UR5LX, JH0YSI, UT5EC #318, JA5OVU, 7M2PDT and JA9BOH. Also heard were JA4BLC, K1FO and F6CGJ. CWNr were I2COR, HA1YA, WB6IMC, W0AH and JR9NWC. On 1296 I had QSOs with EA6ADW and W4OP for and initial. I heard nil on skeds with JA6CZD and S59DCD, and missed my 432 skeds due to an antenna relay failure - Sorry. I am now able to put the 2.3 GHz feed in the dish again. I measured 14.5 dB of sun noise on 20 April which seems about right.

GW3XYW

Stu has extended the east window of his HB 6.7 m dish by re-building the Az drive. He added a 3' dia sprocket wheel on the main shaft. This is driven by a 3" sprocket from a 12:1 gearbox which in turn is driven by a right angle worm gear attached to the motor. The sprockets are coupled by 2 parallel bicycle chains. He worked on 1296 back on 15 Feb JA4BLC, PA3CSG, DD1XF, G3LTF, ZS6AXT, I5MPK, S59DCD, W2UHI and K2DH, on 15 March ZS6AXT, F6CGJ, SM3AKW, OE9XXI, JA4BLC, EA3UM, OK1KIR, EA6ADW, DJ7FJ, JH5LUZ, G3LTF, OH2AXH, OZ4MM, DD1XF, N2IQU, F1ANH, W2UHI, K5JL, WB5LUA, KB2AH, N6BQ, DJ9YW and VE1ALQ, and on 16 March F9QX, F5PL, LA8LF, G4CCH, G4DZU, ON4RA and F6KSX. Stu was not active in March. He has problems on 70 cm from noise generated by the super regenerative receivers used in car electronics, and still has difficulty with split frequency operation of 13 cm. Instead he decided to spend his time repairing his 10 GHz dish which was damaged in an Autumn storm.

HB9BBD

Dominique's log on 1296 reads -- on 16 Feb JH5LUZ (529/549), OE9ERC (579/569), SM2CEW (529/559), OZ4MM (559/559), LX1DB (569/449), W2UHI (559/559), F2TU (549/549), LA8LF (569/549) and PA3CSG (549/549), on 16 March F1ANH (559/549), LA8LF (559/549), DD1XF (529/549), ZS6AXT (529/559), SM3AKW (559/559), G3LTF (529/549), F5PL (559/529), F6CGJ (569/559), EA6ADW (519/549), W2UHI (529/549), K4QIF (539/549), OE9XXI (569/569), OK1KIR (419/549), CT1DMK (419/529), F5PAU (539/549), K2UYH (559/559) and VE1ALQ (559/559), on 24 March

K2DH (539/559), on 12 April DD1XF (539/539), DJ9YW (539/449), F5PL (559/559), W4OP (419/O) for initial #81, on 13 April EA6ADW (569/559), K2DH (569/569), EA6ADW (569/559) and partial NL7F (429/???), and on 19 April DD0SB (529/529) #82. QSL cards are still needed from F1SDR, F5AQC, DD1XF, K2DH, EA6ADW, SM5DGX and W4OP. My totals are now up to initial #82, 25 DXCC and 12 US states. My 10 m dish project is also moving ahead. I have written permission to raise the dish in a farming area - something we all thought was next to impossible. The autotrack is ready - OE5JFL's system works perfectly on the bench. The feedhorn is finished and just needs alignment.

HB9SUL

Andrea writes: I have had to change my plans, because of an unexpected problem with my work here in TA2. I'm going to stay here for about 2 more months. This will delay my return and I'll definitely miss the Eur Contest. By the way, the weather is getting warmer despite the snow fall we had 2 days ago. I've met a very enthusiastic and interested HAM here in TA. There is already a suitable QTH with enough power supply, tower and very good take off for EME operations, but unfortunately I haven't got the hardware here (or the time). My address is (AK-ENERJI, Att. Turbomach, Mr. Andrea Bianchi, Denizcali Koyu Taskopru, P.K. 115 YALOVA, TURKEY).

I6PNN

Amato activity report for the 2nd leg of DUBUS/REF EME Contest on 2304 MHz follows -- I made 14 QSOs including 4 dups and 1 SSB QSO. I worked on 12 April IK6EIW, OH2AXH, ZS6AXT, OZ4MM, HB9SV and WB5LUA, and on 13 April IK6EIW, ZS6AXT, F1ANH, OE9RC, HB9SV, WB5LUA, W7GBI and OE9ERC on SSB.

JA4BLC

Yoshiro concentrated on 13 cm in the DUBUS/REF Contest. I made 7 QSOs with 5 different stations on 2304/2424 including 2 initials and heard another 5. I worked on 12/13 April, on 432, K4QI, N2IQU, K2UYH, K1FO, W7QX, JA5OVU, JH0YSI, OH2PO, DF3RU, DK3WG, OZ4MM, I2COR, EA3UM, K5JL, W7QX (dupe), SM3AKW, 7M2PDT, JH1XUJ, DF3RU (dupe) and JH4JLV; and on 2304/2424, OE9ERC (579/569), WB5LUA (559/559), W7GBI (569/569) and (55/54) on SSB for initial #12, OE9ERC (569/569) (dupe), OZ4MM (549/449) and OH2AXH (559/569) #13. Heard on 2304 were IK6EIW, I6QGA, ZS6AXT, F1ANH and HB9SV. No signal was heard from DF3RU on 2424.1.

I wish to express my thanks to all those who have made 2424 receivers for listening to JA on 13 cm! My final contest score was 2 on 144, 18 on 432, 27

on 1296 and 5 on 13 cm.

K0RZ

Bill was not QRV for the Feb or March SWs, and was only active on 13 April during the DUBUS contest. He QSO'd 7M2PDT, EA3UM, F6CGJ, G4RGK, IW5AVM, JA5OVU, K1FO, K4QI, K5JL, K5WXN, KA0RYT, OH2PO, OZ4MM, PA2CHR (339/O) for initial #232, SM3AKW, UR5LX, VE1ALQ, VE6TA, W0AH, W0KJY, W7QX, W8MQW, WA4NJP, WA7BBM and WI7Z. Bill continues using fixed vertical polarity.

K1FO

Steve had a great time in the Eur EME contest, although it was a bit slow on Sunday afternoon. Conditions were good but polarity was not very distinct most of Sunday and his own echoes were weak during the daylight hours due to Faraday rotation. He did have some problems with precipitation static on Sunday afternoon. It was very bad during his QSO with KD4LT and he could barely copy Scott by the end of the QSO. The static got so bad that he thought he was going to lose the preamp. Due to this he was forced to take a break for a couple of hours. The daytime hours were a dream, as they caused no disruption of his normal sleep schedule. Stations worked in April were on 10 April W8MQW, on 11 April JA5OVU, during the contest on 12 Apr KA0RYT, W0AH, KB3PD, K2UYH, WI7Z, W8MQW, K5WXN, 7M2PDT, JJ1NNJ, JH1XUJ, JA3IAF, JA2TY, JH0YSI, JA5OVU, JH4JLV, JR9NWC, JA4BLC, K4QI, N4GJV, JS3SIM, VE6TA, IW5AVM, DF3RU, I2COR, SM2CEW, OH2PO, OZ4MM, F5AQC (559/559) #512, HB9SV, G4RGK, DK3FB, VE1ALQ, PA2CHR, HA1YA, EA8FF (same as EA8/ON5FF), UT5EC, K5GW, F5CGJ, SM3AKW, UT5DL, DL4MEA, K5JL, EA6ADW, SM3BYA, DK8VS, DL4KG, G3HUL, W0KJY, F1IKA (same as F5SDD), NC1I, DL9KR, WA7BBM, G3LTF, W7QX, K9BCT, K0RZ, JA2KRW, WB6IMC, KL7HFQ, JA9BOH, ON4KNG, UR5LX, CT1DMK, W1ZX, UA6LGH, I5CTE, KD4LT, K7XD partial on sked - no R's, VE4MA, DL3EAG. All QSO's were on random. The K7XD sked was set up on the net as he is a new station. The contest total was 70x37 which was almost the same as last year's 71x36 score. Steve offers these comments regarding the discussion about changing multipliers in the ARRL EME Contest to include U.S. states.

-1- He wants to make it clear that he is not suggesting any changes to the contest.

-2- Any suggested changes to the contest should be clearly thought out as to what their effect will be on world wide EME activity before they are passed on to the ARRL. Specifically consider the following:

-A- If the objective of the proposed change is to alter the scoring such that a

U.S. station will win the contest, it is unlikely to work. The top Eur stations make more QSOs than do stateside stations. Adding more multipliers will end up increasing the point difference as it is likely that the big European guns will still work all the available multipliers.

-B- The introduction of states as multipliers will require the use of their QTH in the contest exchange as is done in the VHF contests. It has been suggested that EMEers know where everyone is located or they can use a cheat sheet to find out the contest multipliers. This will discourage new EME stations to enter the contest, and especially discourage them from sending their logs as how will a new station know who and where everyone is. I maintain my own database of 432 MHz EME stations which I update almost every week when I listen in to the 20 m net and I can't keep track of every call and where they are. I also do not believe that a legitimate contest QSO is made when you have to look up the multiplier instead of receive it over the air. Adding a report to the exchange will also make it more difficult to work the weak ones. In addition stations may be chasing initials and will not be interested in making a contest exchange.

-C- The purported objective of the change is to get the Eur stations to stay on longer so they work more multipliers which will come from rare western U.S. states. The serious Eur EME contesters already stay on virtually to their moon set, so nothing will change with them. The casual European operators simply will not stay on longer because they are not serious about the contest and hence they will not care if they pick up a couple more multipliers and still will not have a reason to stay up.

-D- If U.S. states or ARRL sections are counted as multipliers than is there a reason why the Australian provinces, Russian Oblasts or provinces and states from any other country in the world should not also be counted as multipliers? Why not go all the way to WW grid squares. Where do you draw the line?

-E- If the objective is to get the Europeans to stay on longer there are two ways to accomplish this.

A) Get more US stations QRV, especially from the western states so there will be a reason for them to stay on.

B) Run DX expeditions to the western U.S. states during the contest so operators interested in new states or new initials will have a real reason to stay on. Although this dissertation may sound like I'm opposed to the change, in reality I'm not offering an opinion at this time. What I am trying to say is "Before you amputate the patient's foot, make sure the real problem is not that the patient has a sore throat!"

70 cm EME totals for K1FO are: #512 initials, 49 states and 75 DXCC.

K4QI

Rusty echoes the comments on poor April conditions of others ... Libration was the worst ... His operating time was also limited because of problems with high winds on 13 April. He QSO'd on 432 on 12 April W0AH, VE1ALQ, KA0RYT, JJ1NNJ, JH0YSI, W8MQW, JH1XUJ, WI7Z, JH1EFA, VE6TA, K5WXN, JA4BLC, JA3IAF, JA2TY, JR4NWC, JA5OVU, JH4JLV, W7QX, N4GJV, K1FO, JS3SIM, 7M2PDT, EA8FF, K9BCT/4, EA3UM, DF3RU, UT5DL, KB3PD, K5JL, EA6ADW, UR5LX, DL4KG, OH2PO, K2UYH, F6CGJ, DK3WG, SM3AKW, UT5EC, F5AQC, I5CTE, PA2CHR, DK3FB, ON4KNG, W0KJY, DL9KR, OZ4MM, G3LTF, F1IKA and DL3EAG, and on 13 April JR4KRW, JR4NWC (dup), KL7HLQ and K0RZ.

KB3PD

Rick (FM29-DE) worked the following in the April SW. On 2 April at 0030 K1FO (559/449), 0123 N2IQU (599/549), 1718 K5GW (579/569), 1838 K4QI (559/449), 2127 OH2PO (599/O) and 2300 K2UYH (559/449), and on 13 April at 1950 OZ4MM (559/449). DK3RU as CWNR and G3LTF was copied but disappeared before he had a chance to call him. Rick will not be available for skeds on the May SW, but is looking for skeds for June.

LA8LF

Anders is just about QRV on 13 cm -- I was listening on 13 cm during the contest and heard following stations: OZ4MM (549), OH2AXH (559), WB5LUA (559), OK1KIR (439), HB9SV (439), VE4MA (449), ZS6AXT (O), W7GBI (569) and F1ANH (449). I have not measured sun noise as I have had only clear sky and do not want to destroy my feed (W2IMU) due to heat. CS/G noise is 6.4 dB. I hope to be QRV with 20 w at my feed in May. I should finish my 5760 MHz W2IMU feed today and plan to do some sun noise tests on this band in the coming weeks. I expect to be QRV on 6 cm in June with 20 w at feed and a DJ9BV type preamp.

NC1I

Frank has a problem with his array. The H plane pattern has become very broad and the pattern may also be skewed. Due to this he was only active in the Eur EME contest for a short time as he could barely copy his own echoes and could only hear a couple of signals on the band. He will not be QRV until the problem is found and corrected.

NP4B

Bob is now QRV on 23 cm. He worked on 19 April OE9ERC (599/439), and on 21 April VE4MA (M/M). Bob is using a 15' dish, 60 w and a 0.75 dB NF LNA. He is expecting to get a better preamp from WD5AGO shortly, and is working

on at getting more TX power (2 x 7289 now but with low drive and air cooled). Bob is available for skeds and can be reached via e-mail at Bob.NP4B or phone at (787) 878-6723.

OK1DFC

Zdenek's QRM problem is back and made operation during the REF/DUBUS Contest on 70 cm impossible. He is moving up to 1296 where the band is absolutely clear. He has a 3.8 m dish with .38 f/d, VE4MA feed, TH338 PA with 800 w and a 2 x 7289 driver, and .4 dB NF FHX35 preamp. He hopes to be QRV on 23 cm this summer. If conditions change 432, he will be back on that band.

ON4KNG

Peter finished the Eur EME Contest with a score of 21x17. He contacted on 12 April between 1800 and 2235 OH2PO, N4GJV, DF3RU, VE1ALQ, KA0RYT for initial #117, F5AQC #118, G4RGK, DL4KG, EA6ADW, PA2CHR, K5JL, K4QI, G3LTF, SM3AKW, OZ4MM and EA3UM, and on 13 April from 1310 to 1945 JH4JLV #119, UR5LX, K1FO, SM2CEW and K5WXN #120. Heard were DL9KR, OK1KIR, DL3EAG and JA5OVU.

OZ4MM

Stig in the DUBUS/REF Contest worked 13 stations on 13 cm and 67 on 70 cm -- Initials on 70 cm were JA3IAF, DL4KG, EA3UM, PA2CHR, CT1DMK, F5AQC, F1IKA, DL4MEA, WB0GGM and KB3PD to bring me to for 132 initials. I found the condx poor on 70 cm, and also a lack of activity. I will be around 13 cm next month.

SM2CEW

Peter was active in the REF/DUBUS contest on 432 in April. He worked the following stations: OZ4MM, JA2TY, JH4JLV, JH0YSI, JA2KRW, SM3AKW, IW5AVM, F5AQC for initial #321, EA3UM, EA6ADW, CT1DMK #322, OH2PO, F1IKA #323, DF3RU, EA2LY #324, K1FO, I2COR, N4GJV, G3LTF, G4RGK, EA8FF, DL9KR, VE1ALQ, DK3WG, KA0RYT, UR5LX, JS3SIM, UT5EC, PA2CHR, UT5DL, ON4KNG, VE6TA, WI7Z #325 and KL7HFQ #326. Peter was pleased to work 6 initials and has already sent QSL's to all. Peter notes that he has lately received cards from about 60 stations, and very few had SASEs; so it was a considerable cost to reply to all. In the future he says that he will only reply to cards sent with an SASE included, as he is not interested in QSLs myself.

SM3AKW

Karl writes -- Being on fixed horz pol was frustrating during the contest weekend on 432. Most of the time I barely heard my echoes. This puts a lot of doubts in your mind when it stays like that for such a long period. In the late US

window both nights echoes were normal, but the QSO rate was low with many getaways. On 432 I worked on 12 April at 0740 JH0YSI, 0847 OK1KIR, 1113 JR9NWC, 1143 OH2PO, 1243 F5AQC, 1251 G3LTF, 1308 OZ4MM, 1356 SM2CEW, 1425 EA3UM, 1753 K1FO, 1801 N4GJV, 1945 K2UYH, 1950 DF3RU, 1955 VE1ALQ, 2007 UT5EC, 2018 K4QI, 2103 UR5LX, 2112 F6CGJ, 2155 K5GW, 2221 ON4KNG and 2228 K5JL, on 13 April at 0907 7M2PDT, 0937 JJ1NNJ for initial #300, 0945 JA5OVU, 1026 JA4BLC, 1220 JH4JLV #301, 1238 JA9BOH, 1726 KD4LT, 2102 DK0TU, 2153 UA6LGH, 2200 G4RGK, 2227 W0AH and 2328 W7QX. On 2304 I worked on 12 April at 1610 ZS6AXT, and CWNR I6PNN, IK6EIW, OZ4MM and F1ANH. My score was on 432 33x22 and on 2304 1X1.

UR5LX

Sergej reports that the weather during the contest was terrible and limited activity from Ukraine and Russia. Active stations were UR3EP, UT5DL, UT5EC, UA6LGH, UA9FAD and UR5LX. Sergej heard nil in skeds with DJ5MN, HP3XUG and KL7HFQ. His contest results were 60x37 on 432. Initials were F5AQC, JA0VI and VE4MA to bring him to #315.

VE4MA

Barry says -- Back in Jan I worked on 13 cm NU7Z for initial #29, SM3AKW #30, WA8WZG #31 and ZS6AXT #32, and on 23 cm NL7F #104 and WA8WZG #105. I QSO'd on 23 cm in Feb S659DCD #106 and K4QI #107, in March DD1XF #108, F5PAU #109 and ON5RR #110, and in April on 13 cm HB9SV for initial #33, and on 70 cm 6 stations including an initial with OZ4MM #222 and DXCC 45. I attempted to get on 6 cm for I6PNN, but had an RX problem. My contest total was on 70 6x6, on 23 18x11 and on 13 4x4. I should mention that on 70 I used my 12' dish with polarity switching and 750 w. I had switching trouble on 12 April that prevented 70 cm operation. My dish does not work well on 5.7 GHz - (it acts like a 9' dish and like a 6'dish on 10 GHz). On 10 GHz I hear every one, but my 35 w TX is not enough for a QSO. I hope to get a 10' GHz dish or 12' 6 GHz dish installed when spring arrives! I will be QRV on 10 this summer! I still have lots of snow. I had 16" of ice pellets on 6 April. The 6' drifts are down to 3' today!

VK2FZ

Adrian was hoping for better results on 23 cm with his 4 yagi array during the DUBUS/REF Contest. The only NA station heard was N2IQU at 1.5 deg el. Adrian can actually see the moon at negative el as his QTH is at 440 m and clear to the ocean 20 km away. Unfortunately Mark's signal faded as the moon rose. He also copied OZ4MM and OE9XXI. He worked OE9XXI (O/O) on the 2nd of 2 skeds after Peter had switched to linear pol. Adrian says that his antenna will be up for a few more months and that he is will to try with others.

W1ZX

Willie missed his sked on 12 April with UA4API due to high VSWR from heavy rain. He had only 1 contact over the SW, on 13 April at 2018 K1FO (449/449). Willie found conditions to be very poor. He called several CQs with many replies, but had problems with QRM and completed no contacts.

W7GBI

Charlie had problems during the 1st half of the REF/DUBUS Contest and never made it on 1296. He was QRV on 2304 during the 2nd leg with good results. He made 10 QSOs and added initials with OH2AXH, NU7Z, WA8WZG, JA4BLC and I6PNN. He apologizes to stations missed, but he had problems with high winds which made keeping the dish on the moon very difficult and poor hearing. Charlie is making progress on 5760 and 10 GHz and hopes to be on these bands soon. His main worry is a hearing loss. He has hearing aids, but they do not seem to help off the moon.

W7QX

Jerry worked on 70 cm KB3PD, KA0RYT, WI7Z, JA9BOH, 7M2PDT and JS3SIM during the past month. In the Eur Contest he added on 12 April K4QI, KA0RYT, WI7Z, JH0YSI, JA5OVU, JA4BLC, JA3IAF, JA2JRJ, UR5LX, EA3UM and OH2PO, and on 13 April UR5LX, EA3UM, OH2PO, K1FO, 7M2PDT, JA4BLC, VE1ALQ, PA3CSG, OZ4MM, K0RZ, DF3RU, WA4NJP, F6CGJ, K5GW and SM3AKW. Heard were K5JL, K2UYH, N2IQU, N4GJV, W7CI, JA2KRW, W7CI, PA2CHR, W0KJY, JS3SIM and K5WXN.

ZS6AXT

Ivo reports -- On 9 April I finally worked on 23 cm WA8WZG (449/559) for initial #120. It looked like our QSO was jinxed, many skeds with all sorts of equipment failures. For the 2nd leg of the REF/DUBUS Contest I fitted a CCTV camera on to the dish. This provided a great improvement in accuracy of pointing! (Especially with the play in my AZ drive). Fortunately 95% of the time the weather was clear. Stations worked on 13 cm were on Saturday IK6EIW (559/539) for initial #11, HB9SV (549/549) #12, OH2AXH (569/439) #13, OE9ERC (589/569), SM3AKW (O/O) - Karl was running just his driver with a 2C39, I6PNN (O/O) #14 (he was 559), OZ4MM (569/439), WB5LUA (569/449), OK1KIR (449/449) with my elevation at only 3 degs, and on Sunday I6PNN (rpt), F1ANH (O/O) #15 (559 with jumpy signals), HB9SV (rpt) and WB5LUA (rpt) for a total of 10x9. CWNr many times was W7GBI (569). Listening on 2320 for G3LTF and others did not bring any results. I received a message from JA4BLC that he is receiving me OK. I will have an xtal for JA band in about 2 weeks, and am looking forward to the 1st JA-ZS QSO. In general, I would say that I missed at least 5 stations who did not operate or came too late for me. I have a much shorter Moon window than Eur.

Concerning e-mail, I connect only twice a day, 0700 and 1900 plus/minus. So if you're asking for skeds, take this into account please -- [Ivo, ZS6AXT](#) [Ivo asks when K2UYH will be QRV on 2300. I was on 13 cm some years ago using the club call WA2WEB for which I am trustee. Unfortunately I have no plans to return soon.]

K2UYH

I had an excellent time during the 2nd part of the REF/DUBUS contest, despite the conditions which made call identification difficult for me even when signals were relatively strong. I QSO'd on 12 April at 0006 VE1ALQ (559/549), 0021 N4GJV (559/579), 0032 W11Z (449/559), 0036 KA0RYT (559/559), 0043 K1F0 (569/559), 0052 K5WXN (559/449), 0103 partial KB3PD - figured out call too late, 0015 JH0YSI (559/559), 0133 JA3IAF (559/569), 0142 JA2TY (559/559), 0148 JR9NWC (559/559), 0204 JH4JLV (559/559), 0217 JA5OVU (559/569), 0238 W0AH (559/449) and JA4BLC (559/559), and on 13 April at 1900 QRZ - too fast, 1926 K4QIF (569/559), 1932 EA3UM (559/559), 1938 F6CGJ (559/559), 1946 SM3AKW (559/559), 1955 K5JL (559/569), 2002 DK3FB (549/549), 2008 K5GW (569/569), 2025 EA3ADW (559/449), 2034 F5AQC (559/559), 2043 W0KJY (549/559), 2050 DF3RU (559/559), 2058 PA2CHR (559/O), 2119 G3LTF (559/569), 2126 G4ALH (549/549), 2134 EA8FF (559/559), 2148 G4RGK (549/539), 2156 WA7BBM (559/559), 2206 DL3EAG (449/439), 2222 WB6IMC (559/549), F1IKR (549/449) for initial #591, 2244 OZ4MM (569/559), 2301 KB3PD (549/559), 2315 VE6TA (549/559), 0338 JA9BOH (559/559), 1935 UR5LX (569/569), 1939 OH2PO (569/559), 1946 UT5EC (559/559) #592, 2000 I5CTE (549/449), 2018 DK4KG (449/439), 2029 DK8VS (439/O), 2036 G3HUL (449/449), 2048 UA6LGH (549/559), 2125 partial SM3BYA? - not sure of call, 2150 G4RGK (549/549) - dup, 2156 VE4MA (459/559) and 2205 IW5AVM (549/429) for a total of 50x23.

NETNEWS

K7XW is the new call of KB7UWC. He reports copy on 1296 of EA6ADW, but received no reply, and nil from K2DH.

EA2LY is in new grid (IN93). He was in grid (IN80) for the 1997 DUBUS Contest. So QSOs are initials if you worked before 1996. When in IN80 he may have used EA4LY or EA2LY/EA4.

F5SDD and **F1IKA** appear to be the same station. F5SDD is running 8 x 26 BV yagis, TH6007 PA at 600 w and MGF 1302 (.45 dB) LNA. His e-mail address is

[E5SDD](#) or [F1IKA](#)

VE1ALQ added initials on 23 cm with JH5LUZ and W4OP, and 1 on 70 cm JA3IAF. Darrell scored in the contest 36x? on 432.

LX1DB was not on 6 cm in April due to el drive problems, but is now QRV. **W0AH** reports 13 contacts on 70 cm in the contest.

VE6TA on 70 cm scored 17x14.

N2IQU had feed problems during the contest.

K5JL worked 45x? including WA7TZY in the contest on 70 cm. DJ5MN was (M) copy with a single yagi.

WB5LUA worked on 2300 OE9ERC, OH2AXH, ZS6AXT, OZ4MM, HB9SV, I6PNN, VE4MA, W7GBI, F1ANH, WA8WZG, NU7Z and JA4BLC.

W7FN worked on 70 cm in the April SW G3LTF, VE1ALQ, W0AH and KA0RYT.

NU7Z added W7GBI and WA8ZWG on 13 cm to bring him to #8 initials in 4 states and 5 countries.

WI7Z worked 15 stations and 2 initials to bring him to #39. He CWNR F6CGJ many times.

KA0RYT scored 28x19 on 432 in the contest with 4 initials: ON4KNG #57, F6CGJ #58, JR9NWC #69 and ? #70.

K7XD is a new station with 4 yagis and 600 w. Derek is hearing stations. He can be reached at 360-573-9673 and is interested in skeds.

KL7HFQ worked on 432 in the contest K4QI, OH2PO, K1FO and JH5OVU.

KF0M was not QRV in April because of business travel and probably will not be QRV again until after mid May.

W4HHK worked on 13 April on 13 cm WB5LUA (O/O), WA8WZG (M/O) for initial #36 and a new state and F1ANH (O/O).

WA7TZY was active in the contest with 8 x F9FT yagis and 1200 W+. He does not want any skeds and operates on random only.

F6CGJ reports contest scores of on 23 cm 59x33 and on 70 cm of 32x21. Louis may be QRV on 10 GHz for the next SW. He says the '98 conference will most likely be in

Aug not Sept.

UR5LX ended with 60x37 in the contest with 3 new stations: F5AQC, JA0VI and VE4MA.

UR3EP, Vladimir made initial QSOs with OH2PO and K5GW in the contest. He is finishing a new 600 w final.

DK3WG has repaired his station and is QRV on 70 cm again. He added initials with JA3IAF, JJ1NNJ and F5AQC to bring him to #332. Jurgin needs QSL cards from N6OVP, WA8WZG, K5GW, N4UK, WI7Z and WB6IMC.

UT5EC scored 25x? in the contest with 10 new stations: 7M2PDT, KA0RYT, F5AQC, K5GW, EA8FF, K4QI, EA6ADW, G3LTF, JH0YSI and PA2CHR to bring him to #91.

W7CI worked 7M2PDT on random. Steve will not be QRV for the May SW.

W4AD (ex-K4HWG) has a 10' dish and is working on 3 cm EME.

W5ZN (AK) is working on a 432 array, and hopes to be operational on 70 cm EME by the end of June. He is also still working on 5760 EME, but has not yet make a contact. He needs to improve his Az/El control.

EA6ADW's e-mail address is [EA6ADW](mailto:EA6ADW@earthlink.net)

PA3CSG will not be on during the May SW.

G4RGK worked 10 with 200 w and 4 yagis during the contest.

DL1HTT is a new 4 yagis station.

FOR SALE

DF6NA, Rainer now has new high power 1296 MHz amps available. He is offering some **semi-professional HPAs for 1296 for serious DX-work like EME**. The small model uses a YL 1050 and is based on the DUBUS article by DL9EBL. It will produce up to 1.5 kW output. The high-end model uses a Thomson TH 327. Test results with a prototype cavity yielded 2,240 w at 2.55 kV and > 3 kW at 3.5 kV. Efficiency is > 40 % with a gain of about 8 dB. (Max Heater current is 30 A and must be limited for about 5 sec.) Cavity length is about 20". The YL 1050 cavity is priced at US\$1,300 and the YL 1050 is US\$400. The TH 327 cavity is US \$2,000 and TH 327 is US \$500. Also available at the moment are two TH 308s for US \$350 (each). There

is also a chance to get some more TH 308s in the near future. All prices "ex work" (+ freight/insurance). Please reply to [Rainer, DF6FA](#)

K0RZ wants a **10 w or greater 10 GHz TWTA w/sup.**

W1ZX has had some late requests for the '96 EME Int'l Conference Proceedings, but he needs a minimum number for printing. The price is \$US12 + shipping. He also has for sale a **General Radio IF amplifier 1236A 30 Mhz IF** \$US150 + shipping, **Dielectric-Coaxial Dynamics 1000A Wattmeter** \$US125 + shipping, **Bird 43 Wattmeters** (1) \$170, (2) \$185, (3) \$200 with new meter movement + shipping, **Bird 4301 Wattmeter in poor/fair condition** \$US 125 + shipping, **AIL 75 Noise Figure Meter** \$US 275 plus shipping, **AIL 7010 Noise Generator** \$US 25, **AIL 70 Diode Noise Generator** \$US 250, **HP 349A UHF Noise Source** \$US 50, **Noise Comm Noise Diodes NC305** \$ 33, **HP 415A SWR meter** \$US 30, **HP 415E SWR meter** \$US 45 plus shipping, **several Transco "Y" type relays with "N" Connectors** \$US 55 + shipping, **220 MHz to 432 MHz Amplifier 6992 final tube**, 1000 to 2000 w output for \$ 500 pick-up only. Call Willie at 301-645-5584, 2000-2230 EST, FAX.

K9ZZH is looking for info on the **old RCA 6161 tube**. He has several tubes and a cavity and wants to know if it is worth putting it on the air? [As I remember it, you can get a little more out than a glass 2C39. I would put my effort in water cooled 7289s.].

W4AD (ex-K4HWG) is looking for **TWTA for 10 GHz.**

K1FO, Steve has parts remaining to build only **(3) LA-70B, 70 cm, (3) LA-135, 135 cm and (3) LA-200, 2m Lunar-Link Systems amplifiers**. He is sold out of PS-70 power supplies. Parts have been ordered for another production run of power supplies which will again be shipping in June.

There is some bad news, however; **Alan Greenspan (the chairman of the U.S. Federal Reserve Board, who has raised interest rates to slow the US economy) must be on to something in that after several years of near constant prices, inflation is back.** The custom sheet metal for the new batch of PS-70 power supplies has increased in cost by over 10%. Worse than that, some of the components, such as wire wound resistors have gone up over 20%, and the most expensive part in the power supply, the transformer, has increased by 5% earlier this year, and will increase by another 10% in a few months. What all this means is that the price of the PS-70's is going up. Steve is planning to make another production run of LA-70B 70 cm and LA-200 2 m amplifiers, but prices on the new run of amplifiers will have to increase. Prices on the remaining amplifiers from the old run will stay the same until they are sold out. Contact Steve, K1FO at 203-421-3377.

K6LEW has purchased **Rutland Arrays.**

KB2AH has a **full line of cavity amps and 1, 2, 4 and 6 tube ring amps, lin/circular feed horns and LNA's for 432 and 1296...** And recently he has added **mounting blocks for K1FO yagis.** For full details see: [Tom, KB2AH's 1296 WEB Page](#) for price e-mail: [Tom](#), or phone 908-223-5067, FAX 908-223-0901 (24 hrs) or voice 908-223-8124.

DD1XF has for sale **2 6 cm 11 w commercial SSPAs.** He also has **2 6 cm triplate couplers** and **1 6 cm W2IUM feed horn machined from Aluminum with an excellent match.** Pick up only - call Frank at 0049-40-642-82-53.

DL8RDI has **23 cm 800 w cavity amplifiers** for sale. These cavities work with TH 328 and TH 338 (60 w drive) tubes and require about 2100 V at 1 amp. All amps are brandnew and polished. Contact Heiner at (H. Jordan, Nelkenstr. 26, D-93346 Ihrlerstein).

FINAL

This NL will arrive a late and not as polished as I would have like it to be. All my activities seem to be catching up with me. This weekend it was the 22nd Trenton Computer Festival which I have chaired for 22 years.

I have more sad news. Last month was not enough! Lin Holmes, W0MDL, an EME pioneer and a regular on 432 from Minn back in the 80'ies has joined the list of silent keys. Lin will be missed.

The 1296 band is under attack in the U.S. K2DH (an others as W2VVV) urges U.S. EMEers to write to ARRL and FCC to object to EDAP Technomed Prostatron machine use in USA on the 23 cm Band.. 60 w out and >100 kHz wide. There is 915 MHz machine in the states made by Uroligics. EDAP is using availble amateur equipment to keep its costs down. Copy to ARRL, EDAP and the FCC.

[Read and Act on EDAP TECHNOMED, a Threat to 1296 MHz.](#)

There was much debate during recent 20 m EME nets on possible changes to the ARRL contest rules. KB2AH has proposed to count U.S. states and Canadian provinces as contest multipliers. K1FO addresses some of the issues concerning this proposal in detail in his report. There has also been considerable discussion about polarity rotation, etc. on the net. With many more stations now having the ability to change polarazation, we are now seeing the problem of both stations rotating simultaneously. It is like a dog chasing his tail. Joe, K1RQG suggests that it is time to revisit 70 cm protocols.

Sorry but there is no time for more this month. Please keep the news and especially the technical reports coming. E-mail is the preferred way to submit information, but we will take reports in all forms.

CU off the Moon.

73, Al - K2UYH

EME Skeds for May 10/11 1997

[432MHz & up EME skeds](#)

This information was obtained from [Scott, KD4LT](#)

[Top Page](#)

For Comments or corrections: [Rein, W6/PA0ZN](#)
